The Institution of Engineers, Australia: Sydney Division
Engineering Heritage Committee

Oral History Program: Biographical Notes

Francis (Frank) BRADY (1928 -)
Electrical Engineer

Birth & Family: Born 27 May 1928, Tamworth, NSW. One sibling.

Education: Attended Convent Primary School in Tamworth, then De La Salle College, Armidale.

Qualifications: BE Mech and Elec (Hons Mech) University of Sydney; MEng Sci (Nuclear) University of NSW.

Memberships: FIEAust.; International Committee for Large High Voltage Power Systems (CIGRE); Snowy Mountains Council 1978-87; Member of Executive, Electricity Supply Association of Australia 1978-87; Chairman, Electrical Research Board 1978-87; Australian National Committee World Energy Conference 1975-87; Board of the Sydney Youth Orchestra; Institution of Engineers Heritage Committee.

Awards:

Work History: After graduating from University in 1949, Brady successfully applied for a position at the Sydney County Council, Construction Branch, initially involved in contract administration and also took part in site evaluation studies for Lugarno Power Station.

Brady joined the Electricity Commission of NSW in 1951. With the exception of a temporary secondment to Burrinjuck Power Station in 1952 as Assistant to the Superintendent, he spent the period 1951-56 as one of three engineers seconded to the nucleus of Generation Division where he was Personal Assistant to the Head of the Division, Frederick Sykes.

In 1955-56 Brady accompanied Sykes to the USA, UK and Europe to review current power station practice. He was also an observer at the First International Conference on Peaceful Uses of Atomic Energy, Geneva. Because of this experience, Brady was asked in 1958 to visit the USA again, this time with System Control Engineer H. H. Gleeson to investigate the purchase of Automatic Load-Frequency Control Systems for control of power interchange with the Snowy and Victoria. Brady at this time was working at Balmain Power Station as Efficiency Engineer.

On his return to Australia, Brady became involved in a testing program to ensure that governors on generating units were in good order to play their proper role in the automatic load frequency control system, a totally new concept. He was also a member of the Committee which recommended the purchase of the first computer, an IBM 1401 for accounting purposes.

Brady was directly involved in major technical decisions, one of which was to use digital technology to install a monitoring and results computer at Munmorah Power Station.

In 1966 he went to Europe, UK, and USA with A.W.B. Coady, Chairman of the Electricity Commission to investigate technical developments; also attended the World Energy Conference in Tokyo.

In 1969-71 Brady became Assistant Manager of the Electricity Commission. Some of his duties included negotiation of terms of agreement for the power supply to Alcan aluminium smelter, and heading up the NSW negotiations with the Commonwealth as to the terms and conditions under which Jervis Bay Nuclear Power Station would be operated (a project which was later terminated following a change of government).

In 1971 he became Manager and Secretary of the Commission. In this role Brady was responsible for the commercial divisions of the Commission, as well as ensuring that the business of the Board was transacted efficiently and smoothly. Shortly after taking up the position he faced major challenges, some of which were: the first deficit in 20 years of operation due to the Commission's reluctance to increase electricity prices; the removal of a major civil works contractor from Wallerawang Power Station; and a breakdown of industrial relations following three years of unrest, a legacy of the 35 hour week campaign.

During this time Brady set up the Computer Services Branch which acquired the range of Digital Equipment (DEC) VAX computers, and the Contracts Formation Branch which was responsible for the formalisation of the process of drawing up contract documentation, appointing Managers for each of these Branches. A Project Management Branch was set up later.

Brady became Vice Chairman in 1973 with the primary responsibility for operations, planning and construction activities. He strongly advocated the use of fabric filters in the new Eraring Power Station on Lake Macquarie and believes that the development and use of these fabric filters for dust collection has resulted in the cleanest stacks of any power system in the world. During this time Brady fulfilled a long-held dream: to acquire a Power Station simulator for training and research purposes. This was an outstanding success and resulted in simulators being installed at Bayswater, Liddell, Wallerawang and Mt Piper.

During his time as Chief Executive, Brady derived great satisfaction from his role as Chairman of Electrical Research Board of Australia, and membership of International Committee for Large High Voltage Power Systems (CIGRE), being the first Australian to be appointed to the International Executive Committee and Chairman of the Australian National Committee.

It was at Brady's instigation that the Electricity Supply Association commenced the ESAA Mechanical Engineering Schools.

In 1988, after retiring from the Electricity Commission, Brady was appointed Chairman of the Advanced Plasma Engineering Centre, a joint venture of the University of Sydney and the Electricity Commission.

In retirement, Brady has taken part in various consultancies, been a regular columnist for *Australian Electrical Engineer*, a member of the Board of Sydney Youth Orchestra, and involved in the Institution of Engineers Heritage Committee.

Prepared by Jill Willis, April 2006 from oral history interview conducted 11-18.10.1996.

Note: 2 tapes of this interview have <u>not</u> been logged or transcribed. This is in compliance with Mr Brady's request that an EMBARGO be placed on these last 2 tapes due to their confidential nature: they are not to be used for copying, transcription or reference until 1ST January 2010.